

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
**WO 2005/000546 A1**

(51) International Patent Classification<sup>7</sup>: **B26D 3/14**

(21) International Application Number:  
PCT/IB2004/002133

(22) International Filing Date: 25 June 2004 (25.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PA 2003 00975 27 June 2003 (27.06.2003) DK

(71) Applicant (for all designated States except US): INTER  
IKEA SYSTEMS B.V. [SE/NL]; 1, Olof Palmestraat,  
NL-2616 Delft (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SVENSSON, Mikael  
[SE/SE]; 30, Lyngåkra, S-410 30 Harplinge (SE).

(74) Agent: CHAS. HUDE A/S; 33, H. C. Andersens Boule-  
vard, DK-1780 Copenhagen V (DK).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

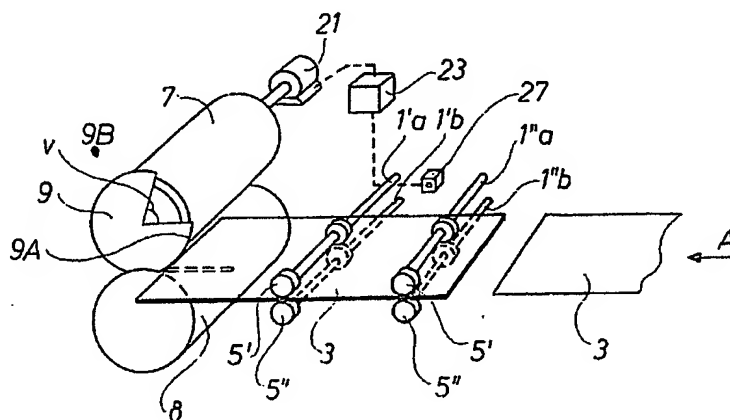
— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: MACHINE FOR SLITTING PLANE PACKAGING BLANKS



(57) Abstract: A machine for slitting plane packaging blanks (3) made of corrugated board. The machine includes a driving roller assembly (1'a, 1'b, 5', 5'') for advancing the blanks and a rotatable slitting roller (7) with a knife (9) for producing a front edge slit (11) and/or a rear edge slit (13) in each packaging blank (3). The knife (9) is circular and defined by two knife edges (9a, 9b), said knife extending across a central angle ( $\nu$ ) of max. 300° in such a manner that said knife presents a knife gap (19) between said knife edges. By means of the slitting roller (7) and an associated driving motor (21) 10 controlled by a programme timer (23), a portion (9A) of the knife (9) adjacent the first knife edge (9a) is adapted to cut the front edge slit (11) out of the front edge (15) of the blank and into said blank (3), whereas a second portion (9B) of said knife adjacent the second knife edge (9b) is adapted to cut the rear edge slit (13) out of a location on the blank (3) adjacent the rear edge (17) of said blank and rearwards through said rear edge by means of said slitting roller (7), said driving motor (21) and said programme timer (23) while said blank (3) is advanced through the machine at a uniform speed. The resulting operational reliability is very high even at a high working speed, and the resulting slits present sharply cut edges. The machine is furthermore relatively inexpensive to manufacture.